

REMARKS

Favorable reconsideration is respectfully requested.

The non-elected Claims 6-15 have been cancelled without prejudice. New Claims 16-20 correspond to Claims 1-5 except that they recite that the part of the tube configuration which is melt-sealed "is deformed" to have a non-symmetrical configuration. Basis for this is clear from Fig. 6.

Claims 1-5 stand rejected under 35 U.S.C. §103 as being obvious over DeCoste in view of the newly cited patent U.S. patent 6,264,098 (Drummond et al.), and as being obvious over Denpou in view of Drummond et al. These rejections are respectfully traversed.

Briefly, the claimed invention is directed to a liquid containing bag, a liquid cartridge or an image forming device, comprising a liquid filling opening part having a tube configuration through which an inside of the liquid containing bag is filled with liquid, wherein the liquid filling opening part is melt-sealed from directions which face each other in a part of the liquid filling opening part, the part which is melted having a non-symmetrical configuration. For example, referring to the non-limiting embodiment shown in Figure 6, an ink filling opening part 13 is melt-sealed from two directions that face each other to be deformed to provide the non-symmetrical configuration 16a, 16b (see page 20, lines 8-20). The non-symmetrical melt-seal has been found to provide a higher yield rate for complete sealing of the liquid filling opening part (see paragraph bridging pages 20-21).

According to the Office Action, DeCoste discloses a liquid filling opening part 13 having a tube configuration which is melt-sealed from directions which face each other. However it is respectfully submitted that this is incorrect. In fact, DeCoste describes that element 13 is a plug to be pierced by a tube from the printer to supply ink from the bag to the printer (column 2, lines 18-20). Thus element 13 is not a liquid filling opening part through

which an inside of the liquid containing bag is filled with liquid, but is instead a part through which the liquid in the bag is discharged to the printer.

There is also no description in DeCoste that the plug 13 is melt-sealed from directions which face each other. Instead, lines 22-28 of column 2 in DeCoste merely describe that the outer bag 25 which fits closely around the bag 15 is heat-sealed to the edge of the bag 15 “at the side having the plug 13.” That is, the sealing of the bag 25 to the bag 15 occurs at the side of the bag 15 having the plug 13, but there is no description that the plug 13 itself is melt-sealed, particularly from directions which face each other.

The Office Action also acknowledges that DeCoste does not disclose an opening part which is melted and has a non-symmetrical configuration (p. 3). The Office Action has therefore relied on Drummond et al. to suggest modifying DeCoste such that the plug 13 is melt-sealed from directions which face each other and has a non-symmetrical configuration. However Applicants respectfully submit that one skilled in the art would not have found it obvious from Drummond et al. to have so modified the plug 13 of DeCoste, even if the plug 13 was in fact a liquid filling opening part.

Drummond et al. discloses a container having a lid 11 which is heat-sealed to the container via an adhesive having an inner heat seal bead 26 and an outer heat seal bead 38. The inner bead comprises a larger amount of material than the outer bead, and so the heat seal – but not the container -- is non-symmetrical relative to the inner and outer sides. Thus, to the extent that Drummond et al. would suggest modifying DeCoste, it would suggest adding a lid which is sealed to the plug 13 with non-symmetric inner and outer beads. It would *not* suggest a non-symmetrical configuration for the plug 13 because the container of Drummond et al. is not caused to be non-symmetrical, only the adhesive bead. Claims 1-5 therefore define over DeCoste and Drummond et al.

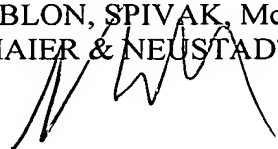
New Claims 16-20 further recite that part of the tube configuration is melt-sealed and is deformed to have a non-symmetrical configuration. No tubular part is deformed by the heat sealing of Drummond et al. and so these claims also define over DeCoste in view of Drummond et al.

Claims 1-5 were also rejected under 35 U.S.C. § 103 as being obvious over Denpou et al. in view of Drummond et al. However, here again there is no evidence that the port 20 of Denpou et al. is melt-sealed, either symmetrically or non-symmetrically; lines 45-46 of column 2 in Denpou et al. merely describe the resin of the multi-layer film. Moreover, as with DeCoste, Drummond et al. would only suggest adding a heat sealed lid, in which the inner and outer beads are non-symmetric. It would not suggest melt-sealing the tubular liquid filling port 20 such that a part of the tubular port has a non-symmetrical configuration. Nor, with respect to Claims 16-20, would it suggest melt-sealing a tube configuration to be deformed to have a non-symmetrical configuration. The claims therefore also define over Denpou in view of Drummond et al.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)
I:\ATTY\RT\251767US-AM.DOC

James J. Kulbaski
Registration No. 34,648
Robert T. Pous
Registration No. 29,099
Attorneys or Record